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ABSTRACT

This paper is devoted to a selected review of literature on drug abuse and dependence among children and adolescents. It is divided into seven sections, each giving information on studies, both nationally and internationally, on a particular drug. These are: nicotine, alcohol, organic solvents (sniffing of substances such as plastic cement, laquer thinners), stimulants and sedatives, marijuana, psychedelic drugs such as LSD, and narcotics. The last section discusses various ways the adolescent drug problem can be dealt with. These include ideas such as educating parents about drugs and their effects and increasing the availability of social-psychiatric services for young people. References are included. (EW)

SOCIAL AND PSYCHOLOGICAL FACTORS OF DRUG ABUSE AMONG CHILDREN AND ADOLESCENTS

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"...the desire to take medicine is perhaps the greatest feature which distinguishes man from animals..."
Sir William Osler

The past decade has witnessed mounting concern with the use and abuse of drugs by young people. Virtually every substance known to have an effect upon the central nervous system probably has been at least experimented with by the younger generation. Even the most seemingly innocent products such as nutmeg, lighter fluid, morning glory seeds, and bananas have been and are being experimented with (successfully or unsuccessfully) by young people to produce "highs" or "kicks." Valuable therapeutic agents such as the barbiturates, amphetamines and the narcotics are also being abused by more and more young people.

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One is impressed by the complexity of causation and manifestation of drug abuse and dependence. Many review articles on drug abuse have concentrated on the pharmacological effects of the drugs, seeking to define some inherent property or effect of the drug which makes it dangerous. Other reports have dealt with clinical case reports of people who have gotten into trouble with drugs; mainly psychotic reactions, suicides or homicides. It is clear, however, that the dangers lie in the social and psychological patterns of use of these substances rather than in the pharmacological properties of the drugs themselves.

There are no neat formulations as to cause or "cure." Perhaps we have reached a point at which we should direct our attention to isolating the important factors related to decisions to use drugs rather than to searches for unidimensional answers. Silverman[1] has presented a series of cogent arguments for multidimensional, individual difference approaches to the issue.

There is no question but that social-psychological

factors are important determinants of behavior patterns that eventuate in drug abuse. Many early studies have shown positive correlations between (1) low socio-economic status, (2) membership in ethnic groups who by and large are shut out from full participation in American society, and (3) the prevalence of drug dependence. Yet we know that drug abuse is not the inevitable outcome among the disadvantaged. Furthermore, drug abuse may no longer be regarded as a phenomenon of the lower class or of minority groups. More and more of our "privileged" youth are involved in experimentation with all classes of drugs.

In addition, attempts to uncover uniform personality patterns among today's youthful drug users have generally failed. Even the concept of "alienation" has taken on so much surplus meaning and has been so grossly oversimplified that one begins to doubt its utility as a concept in the behavioral sciences. It is possible to find drug users who appear to be relatively well-integrated individuals and who are successful in keeping their drug abuse a secret from family and friends. There are others who would be

diagnosed as "sociopaths" for whom drug abuse and dependence is only one aspect--perhaps even the least important aspect--of a delinquent-criminal way of life. There are many borderline schizophrenics for whom the abuse of drugs is but another symptom of their illness. There is the young juvenile who wants to join the gang and who pays the admission fee of drug use in return for the satisfaction of belonging to something significant and meaningful to him. There is also the hypochondriac who experiments with drug after drug, seeking relief from his discomfort via a path leading to chronic drug dependence. The drug user, then, is not suffering from a single disease, but rather his drug abuse represents the culmination of a long spiral of unsatisfactory adjustments to the stresses of life. Nor is there a single drug user, there are only drug users and--broadly defined--the concept includes the majority of members of this society.

The tremendous popular concern with the use of drugs by children and adolescents is related as much if not more to the extreme moral stigma and legal sanctions attached to

drug abuse as it is to the fact that this is an overwhelming personal and social problem. The moral conflict is clearly seen in our attitudes toward the use of marijuana and LSD. There is good reason to believe that our attitudes toward these drugs are more restrictive and more touched with hysteria than scientific knowledge would justify. We are not supporting the use by adolescents, young adults or anyone of any drug which affects the central nervous system unless medically indicated and prescribed by a physician. We are, however, vehemently opposed to punitive, non-medical, moral-legalistic approaches to dealing with individual problems of drug abuse and dependence.

This paper is devoted to a selective review of the literature on drug abuse and dependence among children and adolescents. A review of the literature on college students has been reserved for a later presentation of the results of a large-scale survey conducted by the authors on patterns of drug use among college youth.[2] It is hoped that the summary of findings presented here will help to stimulate interdisciplinary, multi-dimensional research into the

mounting problem of drug abuse. We have included alcohol and nicotine in our review because they are drugs and they are used extensively. Indeed, it seems important that when one is talking about drug abuse, nicotine and alcohol ought to be included along with the other classes of drugs. (Perhaps, too, coffee, tea, cola, and cocoa should be included.) These substances are abused by children and teenagers-often with the consent or at least tacit acceptance of the adult population.

NICOTINE

Cigarette smoking is more of a public health problem than the use of all of the other drugs combined. The relationship between smoking and a large number of serious physical illnesses has been well documented. Equally well documented has been (1) the observation that the longer one has smoked, the more risk he runs; (2) the earlier one begins smoking, the harder it is to give it up; and (3) more adolescents are smoking every year with the sanction and approval of adult society.

Delavan,[3] in a survey of 11,356 pupils in the Sacramento City Unified School District, found that approximately nine per cent of sixth grade, 30% of eight grade, 40% of tenth grade, and 45% of twelfth grade pupils reported occasional (more than once or twice) or frequent use of tobacco products. At all grade levels, more boys than girls reported such use. Further, among the high school students reported use was highest among pupils who did not participate in extra-curricular activities, who judged themselves to be failing, who reported little self-confidence, and whose parents had no formal education beyond high school.

Children who smoke do so first of all because their parents smoke. Secondly, they smoke because their friends do; and third, they smoke because this is one of the most obvious of adult prerogatives which can be copied without fear of overwhelming censure. Following the logic of the current legal approach to drug abuse, one wonders what would be the case if the stimulant effects of nicotine were

emphasized-- i.e. if cigarettes actually bore the lable, "drug."

ALCOHOL

The use of alcohol among adolescents has been extensively studied. [3-21] Given the enormous alcoholism problem which exists in our society (and others), alcohol dependence has been a logical target for research in the behavioral sciences. In his review, Maddox[15] has pointed out that results of most studies dealing with adolescents tend to reveal that: "(1) Although almost all young people taste or drink an alcoholic beverage at least once by the time they are graduated from high school, an established pattern of drinking behavior is characteristic of only a minority of pupils. (2) Among the students who have established a pattern of drinking behavior, intensive use and personal or social complications are not common. (3) Patterns of drinking behavior and abstinence among adolescents, as among adults, reflect both placement in the social structure (e.g., age, sex and socio-economic status) and cultural differences (as reflected, e.g., in regional location or religious identification). (4) The orientation of most

high school students tends to support abstinence while they remain students. That is, young people in high school generally express a negative orientation toward drinking among their age peers, similar to the negative orientation frequently attributed to adults. This negative student orientation tends to decline with advancing age and with increasing assumption of adult roles and responsibilities." (p.339)

In the studies reviewed by Maddox, drinking behavior was positively associated with age and socio-economic status, the latter indicating that the phenomenon is not peculiar to low-status youngsters. Further, drinking prevalence was higher among males than among females, and was related to religious identification (lowest among Protestant adolescents).

In the Sacramento study referred to above, Delavan[3] found that approximately 14% of sixth graders, 28% of eight graders, 40% of tenth graders, and 50% of twelfth graders reported the occasional (more than once or twice) or frequent use of alcohol. At all grade levels, prevalence was higher among boys than among girls. Among the high

school students, prevalence of self-reported drinking was highest among pupils judging themselves to be lacking in self-confidence and below average or failing in school performance.

Slater,[16] in a study of Utah high school students, found that drinking behavior was reported by approximately 30% of 10th and 12th grade students. Again, prevalence was greater among boys than among girls. More girls than boys drank in their own homes or at the home of a friend, and many of the students (18% of girls and 23% of boys) reported drinking in licensed places. The mean age at which the first exposure to alcohol occurred for both boys and girls was 14.5 years. A substantial number of adolescents, however, reported that they started drinking at age 12 or younger. The primary motivations for drinking were social (to follow the crowd or "increase gaiety"). There were, however, 17% of the teenagers who reported drinking to "forget my troubles"--a motivational factor often assumed to be associated with alcoholism.

There are several reports and analyses of drinking

patterns among groups of delinquent adolescents.[5,12,13,20] In a study of 500 court-referred boys at a state reception and diagnostic center, Blacker et al[5] found that 21% of boys aged 12 and under had two or more experiences with drinking. In addition, 53% of 13-year-olds reported such experience. This figure rose steadily and dramatically with age until a high of 83% of boys aged 17-and-over was reached. Pathological drinking was also found to be associated with age. An interesting finding was that rates of pathological and relief drinking were lower among Negroes than among Whites, and more abstainers were among Negroes. The authors emphasize the significance of this finding in view of the fact that "...Negroes (are) overrepresented both among boys in institutions for delinquents and among those apprehended for delinquent behavior."[5] (pp. 230-231)

MacKay et al[12,13] found that delinquent adolescent problem drinkers differ in many ways from "normal" adolescent drinkers. For example, delinquent adolescent problem drinkers drank for the effect, and in reaction to personal emotional problems. Their first drink was taken "away from adult supervision," and most were "younger than age 13

at the time." The peer group provided only the setting and not the motivation for drinking. Parental alcoholism was considered to be a factor in the majority of the cases. In addition, there was a great deal of conflict evidenced between their own drinking behavior and the attitudes that they held toward heavy juvenile and adult drinking. The authors are careful to point out that although loss of impulse control after drinking did exist in this group, a casual relationship between drinking and the occurrence of delinquent acts could not be inferred.[13](p.281)

There is considerable agreement among researchers that normal adolescent drinking is (1) socially oriented group behavior, (2) basically normative rather than deviant, and that, (3) in a very real sense, it is associated with a "rite of passage."[4,8,9,11,14,15,17,19] Given that this is true, Sterne[19] has pointed out the failures and fallacies which exist in the current laws controlling the sale and distribution of alcohol to minors. He notes that "...liquor laws aimed at teen-agers not only fail in their intent; they also produce questionable consequences."[19] (p.58)

It is a well documented fact that alcoholism exists in adolescent children as young as five years of age.[7,11] Little research, however, has been done on the psychosocial factors involved in this problem. There also appears to be an issue with respect to the treatment of adolescent problem drinkers. In the Blacker *et al* study, it is stated that "...although the proportion is small, the number of boys who might be looked upon as problem drinkers, despite their young ages, is high enough to merit concern... the treatment of juvenile offenders should include, for boys with such problems, intensive programs that seek to contain and control the use of alcohol."[5] (p.235) On the other hand, Wattenberg and Moir state that "...heavy-drinking juveniles do not form a distinctive subgroup of juvenile delinquents. The drinking seems to be so firmly integrated into a generally delinquent pattern of behavior that it hardly would appear to be a worthwhile unit of clinical attack... there would appear to be no sound ground for proposing special facilities for the treatment or care of juvenile drinkers."[20] (p.436) The issue is as yet unresolved, although our tendency is to be in agreement with Blacker *et al*.

Clearly, more research is warranted. Jessor et al[21] have presented a convincing argument for a multivariable approach to problems of deviance. Their study included indices of drinking behavior among high school students and clearly demonstrated the utility of the simultaneous consideration of both sociocultural and personality variable in the prediction of deviant behavior (e.g. excessive drinking).

ORGANIC SOLVENTS

Press and Done[22,23] have effectively reviewed the literature on the sniffing of organic solvents among children, adolescents and adults. They conclude that "chronic sniffing appears to have emerged as a permanent and relatively common form of aberrant childhood behavior."[23] (p.620) A wide variety of substances are involved: plastic cements, model cements, household cements, fingernail polish remover, lacquer thinners, lighter fluid, cleaning fluid, gasoline. The average age of individuals involved in this practice seems to be about 14 years, but the range is from as young as seven years through adulthood. It seems to be a phenomenon more common

to boys than to girls, but this may simply reflect the possibility that boys more often come to the attention of authorities. As far as race is concerned, studies have tended to find that more Spanish-Americans and fewer Negroes are represented among sniffers as compared with their distributions in the general population.[21,22]

Although level of intelligence does not appear to be related to organic solvent sniffing, most of the children and adolescents involved show poor school adjustment and low academic achievement. Relationships with social class are relatively unclear. Some studies have indicated that these young people are predominantly from lower socio-economic strata. Other studies have found social class to be distributed in much the same way among organic solvent sniffers as it is in the general population. These children have also been found to come predominantly from families in which there is a great deal of internal strife and/or from fatherless homes.[22,23]

As far as general effects are concerned, Press and Done conclude that: "The effects of solvent inhalation

may often resemble those produced by alcohol, but there is a tendency for sniffing to be associated with greater impairment of judgment and reality perception. Thus, solvent vapor inhalation may lead to accident, violence, and the perpetuation of various bizarre and antisocial acts."[23] Serious withdrawal symptoms have not been noted, but tolerance and dependence accompanied by compulsion often develop.

Nowhere does the futility of trying to control such behavior through legislative restrictions stand out so strikingly. Most of the young people involved in this practive are in their early teens, and it is a sure bet that those who regularly sniff glue also know about sniffing gasoline, etc. Although the smog problem in many American cities might be helped if gasoline were outlawed, this doesn't seem to be a very likely event. What is needed is an emphasis on effective educational and treatment programs and much more research into the social and psychological determinants of this behavior. Further, there is virtually no reliable data on the extent of the prcblem.

STIMULANTS AND SEDATIVES

Relatively little is known about the extent and psychosocial dynamics of amphetamine ("speed") abuse among children and adolescents. In this regard, virtually nothing concrete is known about barbiturate abuse among young people--except that it exists. Smith and Meyers state that: "sedative abuse is a problem in certain school areas and in lower socio-economic groups."[24] (p.8) They further state that: "There has been an almost exponential increase in teenage methamphetamine abuse in the last two years, particularly in the hippie subculture."[24] (p.10) Neither data nor references, however, are presented to support these statements.

The effects of amphetamine abuse on young people have been well-documented elsewhere.[25-28] In most reports on effects, special emphasis has been placed on episodes of acute paranoia referred to as "amphetamine psychoses."

Freedman and Wilson[28] refer to reports of adolescent amphetamine abuse in Sweden and Japan, (where it is held

to be related to incidence of juvenile delinquency). In England, Scott and Wilcox[25] found evidence of amphetamine abuse in 16-18 percent of juvenile delinquents referred to London Remand Homes, and this figure was taken to be an underestimate of use in that particular group. Considering both amphetamines and barbiturates under the legal rubric "dangerous drugs," a 1968 report of California drug arrests[30] indicates that arrests for "dangerous drug" offenses are taking place at an accelerating pace, and that the growth rate for overall juvenile drug arrests is over six times greater than that for adults-- a large proportion of this being accounted for by "dangerous drug" offenses.

In his review of drug abuse among Canadian youth, Unwin notes that "the current upsurge (in amphetamine abuse) is due essentially to the use of amphetamines as excitants and thrill-inducers by the same groups of young people who are devotees of marijuana and LSD".[27] (p.406) There is an interesting question lurking here. Are these, indeed, the same groups of young people? Perhaps not, as revealed in an interesting study by Smith.[29] "Speed freaks" and

"acid heads" were presented as representing two different subcultures with differing value systems and modes of behavior. The former is characterized by thrill seeking and violence; the latter is characterized by what Smith refers to as the "psychedelic syndrome," involving beliefs in nonviolence, nature and magic.

Our study of the literature and clinical experience would lead us to believe that barbiturates, amphetamines and tranquilizers are used by children and adolescents at all levels of our society. Indeed, they may well represent the favorite drugs of the upper social class. The research has yet to be done, however, which sheds light on the incidence of use of these agents in this age range and the social psychological factors relating to such use.

To a very real extent, the blame for abuse of these substances must lie at the doorsteps of (1) drug companies who grossly overproduce them, (2) physicians who prescribe them too freely and too frequently, (3) parents who are careless with the family supply and (4) criminals who see

them as a lucrative source of income. Given that these factors exist, punishment of one who becomes dependent on these drugs--or who uses them illegally and is caught--would seem to be based on logic which is tenuous at best.

CANNABIS

Although little is known about the incidence of hashish usage among young people in our society, the incidence of marijuana smoking seems to be growing in leaps and bounds. Ungerleider and Bowen[31] report that at one high school they could find only one student who estimated that marijuana usage was lower than 70 percent of the student body.[30] Beattie, in the study of California drug arrests referred to above, notes that the majority of juvenile arrests for drug offenses were for marijuana violations: 53% in 1960, 75% in 1967, and 58% in 1968. The drop in the proportion of juvenile marijuana offenses from 1967 to 1968 was accompanied by an increase in "dangerous drug" offenses (from 19% in 1967 to 34% in 1968). In absolute numbers, there were 259 juvenile marijuana arrests in 1960, 3,294 in 1967, and 5,698 in 1968.

One must be cautious, however, in interpreting data based on arrest records, since the influence of enforcement practices cannot be determined. The author notes that: "In the past, the common image of the drug patron was that of a minority subject in middle youth with a rather extensive criminal background. This portrait is reversed today -- almost three-quarters of the offenders are persons of white ancestry with none or only trifling criminal records."[30] (p.28)

Delavan[3] found that 0.3% of sixth grade pupils in the Sacramento City Unified School District reported some experience with marijuana. Among eighth grade pupils, 5% reported occasional (more than once or twice) or frequent use of the drug. An additional 5% reported using it once or twice. For tenth graders, the figure for occasional or frequent use rose to 10%, and an additional 8.4% reported having used it once or twice only. Among twelfth grade pupils, 15% reported occasional or frequent use of marijuana, and an additional 9.1% reported having used it once or twice only. In sum, less than 1% of sixth graders, 10% of eighth graders, 18% of tenth graders, and 24% of twelfth

graders reported having used marijuana at least once. Among the high school students, usage was highest among students who were not extensively involved in extra-curricular activities. Further, prevalence was highest among students who considered themselves to be failing or below average in school performance, who considered themselves to be either below average or superior in abilities, and who rated themselves as either never self-confident or always self-confident. At all grade levels, reported incidence of use was higher for boys than for girls.

Langan[32] cites Los Angeles Police Department figures showing an increase in juvenile drug arrests. Of 4,010 juvenile drug arrests in 1967 (compared with 1,964 arrests in 1966), nearly 74% were for involvement with marijuana.

We therefore have some estimates of the prevalence of marijuana usage among children and adolescents. There is, however, virtually no reliable data on the psychosocial factors underlying the use of this drug in this age range. There are general statements made to the effect that social class is distributed among marijuana users in much the same

way as in the general population, but the statements are usually poorly documented. There are also reports of the possible precipitation of psychotic episodes among adolescents with varying degrees of predisposition (e.g., Milman[33]). Virtually nothing is known about the incidence of and social-psychological factors involved in use of tetrahydrocannabinol (THC) except that it is available on the illicit market.[34] We thus have a long way to go in our understanding of the well-documented rapid growth of cannabis usage in our society.

PSYCHEDELIC DRUGS

The prevalence of the use of such substances as LSD, DMT, and STP has been estimated at one to three per cent of young persons.[35] Again, however, reliable data on children and adolescents is sadly lacking. Louria[35] has noted that the number of hospital admissions of young people suffering from LSD-induced psychoses has been declining. This may well be due to an actual decrease in usage in the face of publicity given to the adverse psychological and genetic

effects of the drug. This may be true in the general population, but one wonders if such is the case in the "hippie" subculture which has placed such personal and mystical emphasis on LSD. We would estimate that prevalence of use currently is concentrated in this latter group.

Clement et al[36] have noted that the age level among psychedelic drug users has dropped such that even twelve-year-olds are now included. This is over and above the occasional reports of accidental ingestion of LSD-soaked sugar cubes by very young children. The scope and nature of the problem of abuse of psychedelic drugs has been the topic of numerous reports.[27, 34, 37-44] Unfortunately, with the massive literature that has accumulated with regard to the use of LSD and other psychedelic substances, we know very little about the social and psychological factors relating to its use.

We do know that a large number of middle- and upper-class young people are involved, and that chronic users form a distinct subculture in our society. Research should

be directed toward an understanding of that subculture and the factors which motivate an individual to belong to it.

NARCOTICS

The description of the problem of narcotics addiction among children and adolescents has been presented well elsewhere.[28,45,46] An important study indicated that adolescent addiction does not occur independent of psychiatric pathology. The authors indicate that:

"...becoming an opiate addict is a highly individualized process which can be understood only in the context of the individual's personality structure, past life situation and present interactions with the significant figures of his familial and peer groups." [46(p.484)]

With respect to socio-economic variables, they further point out that: "Recent clinical experience suggests that it is not (comparatively high) socio-economic status (in ethnic groups and communities where opiate use is widespread) per se, but rather attitudes and expectations on the part of

the family concerning status achievement, that may be one of the important predictors of addiction."[46(p.484-85)]

From studies that have been done in New York and Chicago, it is clear that the typical adolescent addict comes from an environment of material and emotional deprivation, usually from the congested part of a city known for lower incomes and poorer housing. He is often a member of a racial minority, and he approaches life with feelings of inadequacy, frustration, hopelessness and helplessness. He has been isolated from society and from school by a variety of influences. His friends are delinquents and truants and he turns to drugs for their calming, pleasurable effect. His motivation for treatment or change is dismal.[45]

DISCUSSION

We have presented a very general overview of some important aspects of drug abuse among children and adolescents. The issue remains as to what to do about this vexing problem. There is no question but that, among adolescents, the

motivation for discontinuing drug use is far less strong than that among adults. The record of rehabilitation with adult drug users has been one of the more disappointing chapters in the history of medicine.

Drug use among adolescents is a social, cultural, psychological and economic problem and we must seek these kinds of answers to it. There is no question but that harsh laws can be effective, and the Harrison Narcotic Act, until recently, demonstrated that quite well. The incidence of opiate use has declined, but the decline has been accompanied by many evils. Money continues to pour into the coffers of organized crime, and the traffic in heroin continues.

We must examine the structure of the social system within which deviant behavior and mental illness occurs. We must also focus our attention upon the individual who functions, however, aberrantly, within that system. We must know his history, his personality, and his aspirations. Only recently in our society have we begun to explore the social evils associated with poverty and to try to promote

programs which will lift the crushing burden of poverty off great masses of people. This may well do a great deal to decrease the incidence of drug abuse in the hard-core slum areas within our cities. Programs such as the Job Corps may be more effective in reducing the incidence of narcotic dependence and drug abuse on the city streets than the well-meaning but essentially ineffective treatment programs available to us now.

We must pay attention to cultural differences existing between Negroes, Spanish-Americans, and White-Anglo-Saxon-Protestant young people who use drugs. To lump them all together under the rubric "addicts" is foolhardy and totally invalid. We must look also into the family structure and bolster our services to disordered and disrupted families. If one believes that the disrupted family can lead to severe psychological problems in children, then one is hard-put to condone welfare regulations which prohibit aid to families where there is a father living in the household.

Social programs directed at low-income groups, however,

successful, will not influence the upper-middle-class affluent youngster who is abusing all forms of drugs. He is the victim of another form of poverty--a poverty of purpose. A hapless wanderer in a technologically-oriented impersonal world, he seeks the ability to cope through his use of stimulants. Or he seeks fun and thrills. Or he desires social companionship and the intimacy which accompanies the use of all forms of drugs among circles of young people. Or he desires to know himself--to gain insight into what he is as a living person--and turns to the psychedelic drugs for the answers. Or he simply wants out--out of a world which often, to him, seems to have lost sight of humanity.

Reducing the incidence of drug abuse among middle-and upper-class adolescents would seem to hinge upon several factors such as: (1) providing them with a purpose and meaning to their lives--i.e. involving them in programs which have basically humanitarian goals; (2) decreasing the ready availability of dangerous drugs; (3) educating parents about drugs and drug effects; (4) early detection by family

physicians and school nurses; (5) increasing the availability of social psychiatric services for these young people; and (6) removing the stigma of "criminal" from those who use drugs.

What is being suggested here is a broad program aimed at the prevention and early detection of drug abuse. Because traditional therapeutic efforts to "cure" drug dependence have been so unsuccessful, it becomes mandatory to orient ourselves in terms of prevention. In the schools, we should give children some genuine education concerning the nature of drugs and drug dependence. These should not be horror lectures aimed at frightening the children. The comic book approach might be a good one were not the efforts so gruesomely horrible and the examples so overdrawn that they become a source of amusement rather than education. Small group discussions, films and freedom for question and answer periods would do far more toward alerting young people to the potential dangers of drug abuse.

Freedman[47] pointed out the degree to which the school

serves as the major, if not the only, socializing influence in the life of the lower class child. Further, studies have demonstrated that anxiety in children interferes with their ability to learn in the classroom and that inability to meet academic standards may in turn lead to frustration and loss of self-esteem, with accompanying neurotic adjustment. We know that some adolescent drug users are people with a low tolerance for frustration and failure. It therefore follows that a school experience which is characterized by frustration and failure may fertilize the soil in which drug abuse can take root. An approach aimed at providing children at all class levels with a much more enriched and positive school experience might have far-reaching effects upon prevention of drug abuse.

It is our opinion that severe legal measures are not going to be any more effective in the future than they have been in the past. There has been a tendency on the part of legal authorities to provide criminal punishment for a crime of status or condition--that is, drug dependence.

use of LSD, etc.--rather than the customary crime of action. This is not to say that crimes of action carried out while an individual is using drugs should go unpunished, but one should not be punished for being dependent upon drugs.

Drug abuse, then, exists in all strata of our society. Depending upon social, cultural and psychological factors, we must adopt differing kinds of programs for prevention and treatment. Drug abuse on the part of adolescents represents a general pathological response to the stresses both internal and external which they face in the course of maturing. We need to know more about the interaction between social, cultural, physical and psychological factors that predispose individuals to drug abuse. In spite of the fact that we do not know as much about these variables as we should does not mean that we should be discouraged, throw up our hands and ask for stiffer law enforcement. We need to see it as a social problem and not as a criminal matter. We must see the general problem of drug abuse as a symptom of serious social as well as personal illness.

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